REMARKS

Reconsideration and allowance of the subject application are respectfully requested.

Claims 1-13, 15 and 16 are all the claims currently pending in the application. In response to the Office Action, Applicant respectfully submits that the claims define patentable subject matter.

I. Overview of the Office Action

Applicant thanks the Examiner for withdrawing the finality of the previous Office Action.

Claim 1 is rejected on the ground of non-statutory obviousness-type double patenting as allegedly being unpatentable over claims 1 and 4 of U.S. Patent No. 7,483,523.

Claims 1-13, 15, and 16 are rejected under 35 U.S.C. § 112, second paragraph as allegedly being incomplete for omitting essential structural cooperative relationships of elements.

Claims 1-7, 10, 15, and 16 are rejected under 35 U.S.C. § 103(a) as allegedly being unpatentable over *previously cited* Danneels et al (U.S. Patent No. 5,663,951, hereafter "Danneels"), in view of *previously cited* Ishibashi et al, ("A Synchronization Mechanism for Continuous Media in Multimedia Communication", INFOCOM '95. Fourteenth Annual Joint Conference of the IEEE Computer and Communications Societies. Bringing Information to People. Proceedings. IEEE 2-6 April 1995 Page(s): 1010 - 1019 vol. 3, hereafter "Ishibashi") and *newly cited* Davies (U.S. Patent No. 7,043,749).²

² Applicant notes that in the introductory paragraph of the rejection, the Examiner indicates that claims 1-7, 10, 15, and 16 are rejected based on Danneels and Davies. However, in the body of the rejection, ...(footnote continued)

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Claims 8 and 9 are rejected under 35 U.S.C. § 103(a) as allegedly being unpatentable over Danneels in view of Ishibashi and Davies, and further in view of Little et al. ("Network and Operating Systems Support for Digital Audio and Video: Proceedings, 5th International Workshop on Network and Operating Systems Support for Digital Audio and Video, Springer 1995", hereafter "Little").

Claims 11-13 are rejected under 35 U.S.C. § 103(a) as allegedly being unpatentable over Danneels in view of Ishibashi and Davies and further in view of Keshab et al. ("Digital Signal Processing for Multimedia systems", CRC Press 1999, pg. 245 and 274, hereafter "Keshab").

Applicant respectfully traverses the claim rejections.

II. Double Patenting Rejection

The Examiner has rejected claim 1 on the ground of non-statutory obviousness-type double patenting as allegedly being unpatentable over claims 1 and 4 of U.S. Patent No. 7,483,523.

Since claim 1 of the instant application has not yet been indicated as allowable, it is believed that any submission of a Terminal Disclaimer or arguments as to the non-obvious nature of the claims would be premature. As such, it is respectfully requested that the Examiner hold this rejection in abeyance, and allow Applicant to address any remaining non-statutory double patenting issues once the rejection of the claims under 35 U.S.C. § 103 are resolved.

III. Claim Rejections under 35 U.S.C. § 112

claims 1-7, 10, 15, and 16 are rejected based on Danneels, Ishibashi, and Davies. The Examiner is requested to clarify this discrepancy in the next action.

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The Examiner has rejected claims 1-13, 15, and 16 (citing MPEP § 2172.01) under 35 U.S.C. § 112, second paragraph, as allegedly being incomplete for omitting essential structures. The Examiner further states:

The omitted structural cooperative relationships are: Claim 1 cites 'a video link between these connection means'. The Examiner interprets this limitation to claim means-plus-function as in 112, sixth paragraph. However, 'connection means' does not use the term 'means for' e.g. a video link between these connection means, an audio link between these connection means.³

Applicant respectfully disagrees with the Examiner.

Notwithstanding, Applicants respectfully submits that the claims do not omit any essential steps. For example, MPEP 2172.01 dictates that essential steps are steps "described by the applicant(s) as necessary to practice the invention". Here, the Examiner, in citing MPEP 2172.01, does not indicate which allegedly omitted structural elements steps are allegedly disclosed by the specification to be essential to the invention.

Section 2172.01 of the MPEP also cites *In re Mayhew*, stating that "[a] claim which omits matter disclosed to be essential to the invention as described in the specification or in other statements or in other statements of record may be rejected under 35 U.S.C. § 112, first paragraph, as not enabling." The Examiner does not indicate where in the specification specific structures are disclosed as being essential to the invention.

In *In re Mayhew*, the claims were directed to a method of producing a corrosion-resistant, iron-zinc alloy coating on a steel strip. *See In re Mayhew*, 188 USPQ at 356. The specification

 $[\]frac{3}{2}$ The Office Action dated June 10, 2010 at page 5.

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made clear that applying the alloy to the steel strip must occur in a spelter bath at a very high temperature, and that the strip must be cooled after it leaves the bath to ensure a superior alloy coating. *Id.* at 358. To this end, the specification disclosed that a cooling zone is necessary to cool the strip and the cooling zone must be located at the point where the strip leaves the bath. *Id.* In light of these disclosures, the Court affirmed the § 112 rejection of claims that did not include the cooling zone and did not specify the cooling zone's location, as not supported by an enabling disclosure. *Id.*

Unlike *In re Mayhew*, the instant application does not include, nor has the Examiner identified any indication, of structures that are essential to the invention.

The Examiner then improperly combines MPEP § 2172.01 with MPEP § 2181.

Nevertheless, independent claim 1 clearly recites "connection means for the setting up of...".

Therefore, the connection means clearly uses the term "means for".

Accordingly, Applicant respectfully requests that the Examiner withdraw the rejection for the foregoing reasons.

The Examiner also asserts that the term "their own" as recited in claim 2 is allegedly indefinite. Applicant has amended claim 2 in order to expedite prosecution.

IV. Claim Rejections

Independent claim 1 recites:

Audio and video data processing device for multimedia communication, via an asynchronous network with random transmission times, between a first pair consisting of a first audio communication terminal and a first video communication terminal, a second pair consisting of a second audio

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communication terminal and a second video communication terminal, the said terminals being of the LAN type, where at least the first pair consists of independent and asynchronous terminals, and the processing device includes, in association with this first pair, connection means for the setting up of:

a video link between these connection means and the video terminal of the first pair,

an audio link between these connection means and the audio terminal of the first pair,

a video link between these connection means and the second pair, and an audio link between these connection means and the second pair, wherein the connection means synchronizes audio and video data according to a delay.

According to an exemplary embodiment of the present invention, since the transmission of audio packets are usually faster than the transmission of video packets (see for example, page 10 of the specification as filed), the present invention synchronizes the **audio data and the video data** by determining a transmission time difference between the audio and video data, and making up the time difference by delaying transmission of the **audio data** to the receiving audio communication terminal (see for example, pages 3-4 of the specification as filed). When the video data and audio data are transmitted to a receiving terminal, the video data is transmitted immediately (that is, without delay) to a transmission link, while the related **audio data** is stored in a buffer for a time equal to a calculated delay, and is then transmitted to the receiving terminal.

In the Office Action dated October 5, 2009, the Examiner cited column 2, lines 5-11 of Danneels as allegedly teaching "the connection means synchronizes audio and video data according to a delay", as recited in claim 1.

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In the Amendment filed on December 11, 2009, Applicant submitted that Danneels does not synchronize audio and **video** data <u>according to a delay</u>. First, Danneels distinguishes between audio, video and data (see column 4, lines 42-44 of Danneels). Danneels teaches that when <u>data</u> is transmitted from a local node to a remote node, a first subset of the <u>data</u> packets is transmitted to the remote node and then a subsequent subset of the <u>data</u> packets is transmitted from the local node to the remote node after a delay <u>in order to prevent the data packets from overloading the remote node</u> (see column 1, lines 61-65 of Danneels). At best, Danneels delays a portion of the <u>data</u> packets that are to be transmitted to a remote node. However, Danneels does not synchronize audio and video data based on a delay

The Examiner appeared to recognize the failure of Danneels to teach this feature of the claim, since the Examiner then contradicted himself and acknowledged that Danneels does <u>not</u> in fact teach "the connection means synchronizes audio and video data according to a delay", as claimed⁴. The Examiner then relied on previously cited Miao to allegedly remedy this deficiency.

In the current Office Action, the Examiner apparently concedes that Miao does not teach "the connection means synchronizes audio and video data according to a delay".

However, the Examiner <u>again</u> cites column 2, lines 5-11 of Danneels as allegedly teaching the above-quoted feature of the claim.⁵ Applicant again respectfully submits that this portion of Danneels does not teach or suggest delaying audio packets, as claimed. Danneels,

⁴ The Office Action dated October 5, 2009 at page 4.

⁵ The Office Action dated June 10, 2010 at page 6.

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without articulating what a "first subset of data packets" and a "subsequent subset of data packets" are, merely teaches that communications subsystem transmits a first subset of data packets from a local note to a remote node, and then transmits a subsequent subset of the data packets from the local node to the remote node after a delay to avoid overloading the remote node with data packets. Danneels does not disclose audio data and video data. In fact, since Danneels teaches that the communications subsystem subsequently transmits a subset of the data packets, one of ordinary skill in the art would certainly understand that the first subset of data packets and the subsequent subset of data packets are the same type of packets.

In familiar contradiction, the Examiner then again appears to concede that Danneels does <u>not</u> in fact teach "the connection means synchronizes audio and video data according to a delay", as claimed, and relies on Davies to allegedly remedy this deficiency.

However, Applicant respectfully submits that there is no teaching or suggestion in Davies that "the video packets are transmitted without delay, and the audio packets are delayed for a predetermined time period", as recited in claim 1.

Davies appears to teach that <u>both</u> audio and video are delayed (see column 14, lines 32-37 and column 15, lines 48-50 of Davies). This clearly differs from the claimed feature where the video packets are transmitted without delay, and the audio packets are delayed for a predetermined time period.

Further, Applicant again respectfully submits that one of ordinary skill in the art would not have been motivated to combine Danneels, Ishibashi, and Davies in view of their diverse teachings and their different objectives.

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First, Ishibashi relates to the continuous synchronization of master streams and slave streams (Ishibashi does not indicate what the two data streams represent) by delaying the arrival of one of the streams. Ishibashi differs structurally from Danneels in that in the Ishibashi system the source comprises two or more terminals, and the destination comprises a single terminal, while in Danneels, the communication is between two single terminals. Accordingly, Danneels and Ishibashi do not complement each other.

Moreover, the two references teach away from each other in that Ishibashi teaches synchronizing the two data streams so that they arrive at a destination simultaneously (see section 3), while Danneels teaches delaying subsets of data packets so that they do **not** arrive at their destinations simultaneously (thus preventing overloading) (see column 1, lines 61-65 of Danneels). The references are directed to completely different objectives such that there is no reason to combine or modify their teachings in view of each other.

Further with respect to dependent claim 16, Applicant respectfully submits that there is no teaching or suggestion in the cited references that "the video data is transmitted from one of the first video communication terminal and the second video communication terminal to a receiving terminal one of the first video communication terminal and the second video communication terminal without delay, and the audio data is delayed by a predetermined time before being transmitted to a receiving audio communication terminal", as claimed.

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Applicant notes with interest that, although the Examiner broadly asserts that Danneels teaches the features of claim $16,\frac{6}{5}$ the Examiner provides no specific support in the cited reference for any of the elements of the claim.

Further, Keshab and Little do not remedy the above-noted deficiencies of Danneels, Ishibashi, and Davies.

Accordingly, Applicant respectfully submits that independent claim 1 should be allowable because the cited references, alone or in combination, do not teach or suggest all of the elements of the claim. Claims 2-13, 15 and 16 should also be allowable at least by virtue of their dependency on independent claim 1.

⁶ The Office Action at page 8.

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V. Conclusion

In view of the above, reconsideration and allowance of this application are now believed

to be in order, and such actions are hereby solicited. If any points remain in issue which the

Examiner feels may be best resolved through a personal or telephone interview, the Examiner is

kindly requested to contact the undersigned at the telephone number listed below.

The USPTO is directed and authorized to charge all required fees, except for the Issue

Fee and the Publication Fee, to Deposit Account No. 19-4880. Please also credit any

overpayments to said Deposit Account.

Respectfully submitted,

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